

**Notice of Allowability**

Application No.

09/512,909

Examiner

Huy D Nguyen

Applicant(s)

EDWARDS ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/30/2004.
2. ☒ The allowed claim(s) is/are 23-26,28-37,39,40 and 42-56.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☒ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see paper filed on 08/30/2004, with respect to claims 23 and 39 have been fully considered and are persuasive. The 35 USC 102(b) rejection of claims 23 and 39 has been withdrawn.

### ***Allowable Subject Matter***

2. Claims 23 and 39 are allowed. The following is an examiner's statement of reasons for allowance:

Regarding claims 23 and 39, Lindemeier et al. teaches a receiver arrangement for a wireless terminal comprising: a plurality of antennas forming a diversity antenna arrangement [col. 3, lines 11-12]; a plurality of receive paths, each receive path associated with one of antennas [e.g., antenna inputs 11 in figs. 1, 5-8]; a delay element in at least one of receive paths [e.g., phase shifters 24; col. 7, line 7]; a plurality of switches, each switch associated with one of receive paths [e.g., functionality equivalent to the switch in the selector 20; fig. 7]; a combiner, arranged to combine the output of plurality of switches into a combined signal [e.g., antenna combiner 21; figs. 6-8]; a signal assessor, arranged to assess combined signal according to a predetermined metric [e.g., signal quality evaluation circuit 7; fig. 1]; and a controller [e.g., control circuit 8; fig. 1], arranged to selectively switch at least one antenna into its receive path and to determine dependent on assessment whether to change antenna selection or to maintain antenna selection for a predetermined period [col. 3, lines 29-42]. However, the closest prior arts, Lindemeier et al. and Dean et al. (US 5,533,011), either singularly or in combination, fail to

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teach a receiver arrangement for a wireless terminal, for receiving a broadband signal the arrangement comprising: a plurality of antennas forming a diversity antenna arrangement; a plurality of receive paths, each receive path associated with one of antennas; a delay element in at least one of receive paths; a plurality of switches, each switch associated with one of receive paths; a combiner, arranged to combine the output of plurality of switches into a combined signal; a signal assessor, arranged to assess combined signal according to a predetermined metric; and a controller, arranged to selectively switch at least one antenna into its receive path and to determine dependent on assessment whether to change antenna selection or to maintain antenna selection for a predetermined period.

Claims 24-26, 28-37, 52-55 depend on claim 23. Therefore, they are allowable.

Claims 40, 42-51, 56 depend on claim 39. Therefore, they are allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D Nguyen whose telephone number is 703-305-3283. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Huy Nguyen



DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600